JUL 2 1 2006 8

TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

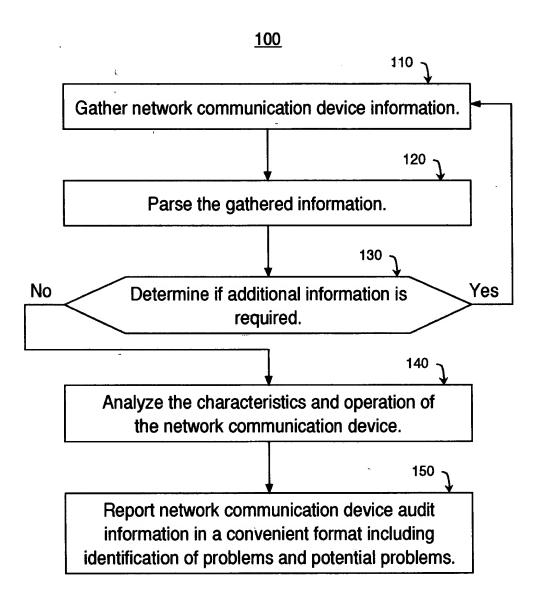


FIG. 1

Inventor(s): Joe DEPAOLANTONIO

USSN: 09/828,022 Attorney Docket #: CSCO-3809

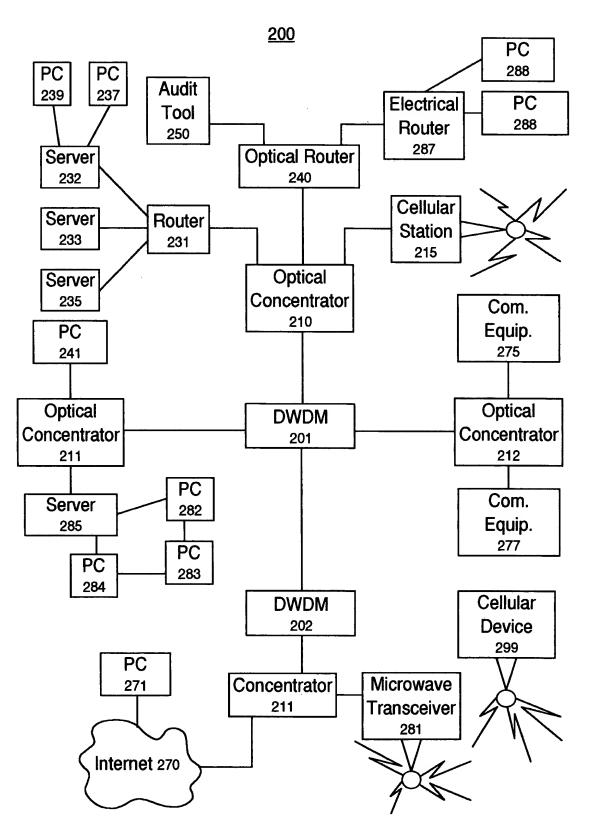


FIG. 2A

Inventor(s): Joe DEPAOLANTONIO 9/828,022 Attorney Docket #: CSCO-3809 USSN: 09/828,022

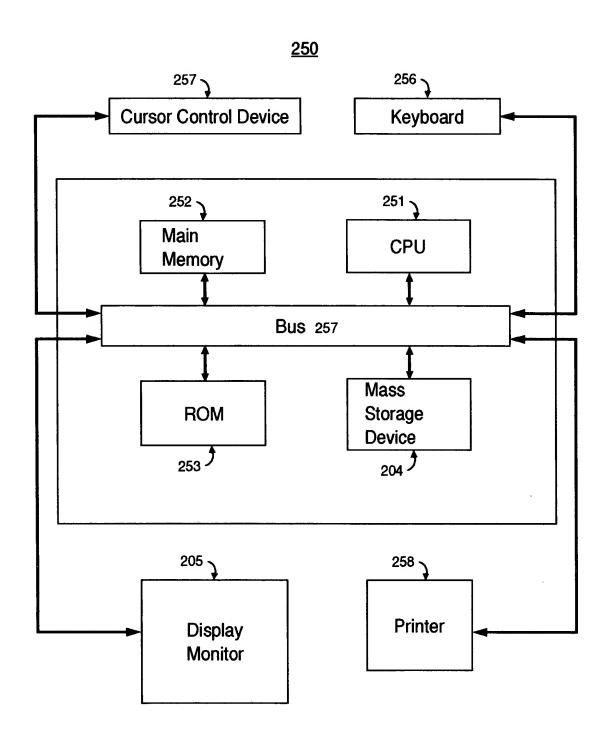


FIG. 2B

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<u>300</u>

NET AUDIT DETAIL SECTION
320

NET AUDIT TASK LIST SECTION
330

APPENDIX SECTION
340

FIG. 3

TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO

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INTRODUCTION TO NETWORK DEVICE AUDIT 410

NETWORK AUDIT DATA COLLECTION SUMMARY 420

NETWORK AUDIT DATA COLLECTION GRAPH 430

NETWORK AUDIT NREP SUMMARY 440

FIG. 4A

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INTRODUCTION TO: Network Optical Concentrator 15454 Audit.

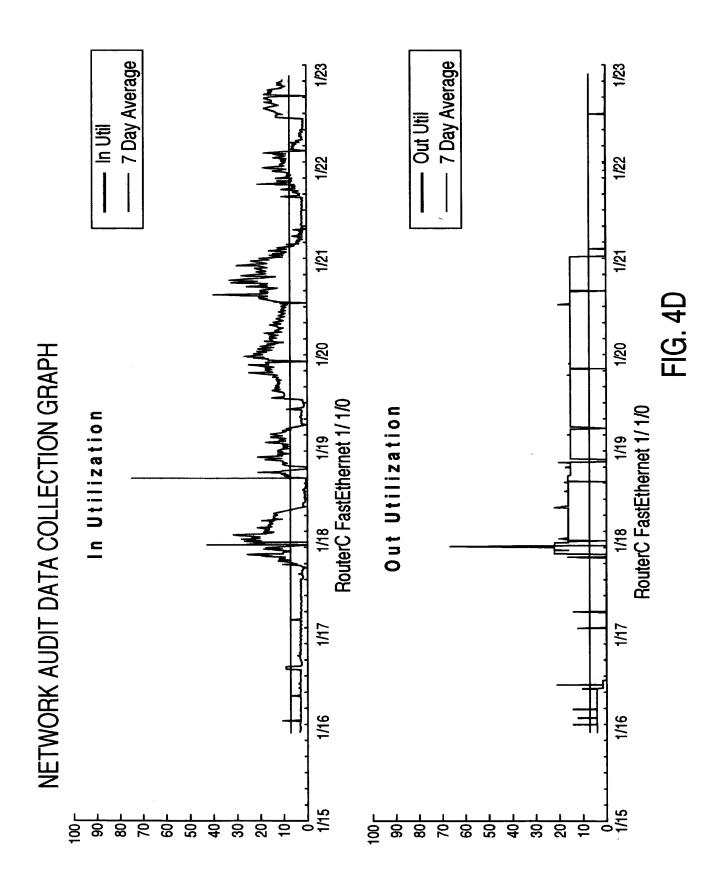
Optional 15454 network audit provides a convenient identification of the network categories (configuration management, fault management, performance management optical concentrators included in a network and assessment of those network optical report assesses the health of these devices according to four network management and capacity management) in a convenient format. concentrators. Network optical concentrators __

FIG. 4B

TABLE					
NETWORK AUDIT DATA COLLECTION SUMMARY TABLE					
NETWORK AUDIT DA	Collection Period	Collection Start Time	Collection Stop Time	Unreachable Nodes	

FIG. 4C

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		NETWORK	-	DIT NF	AUDIT NREP SUMMARY	MARY						
	Status Indicator			S	Status Identification	ntificati	on				Point	Points Assigned
₹7	Warning	Warning indic font. Warning investigated.	indicati ming in ted.	ions apl dicatior	pear in d is mark į	lata tab oossible	ations appear in data tables highlighted in yellow with bolded indications mark possible problematic areas and should be	ted in yel ic areas a	low with tand shoul	olded d be		-
	Critical	Critical Critical	indicati indicati	ons ap ons ma	oear in d rk condii	ata tabliions tha	Critical indications appear in data tables highlighted in red with bolded font. Critical indications mark conditions that require immediate attention.	ted in red nmediate	with bold attention	ed font.		1000
57	NET AUDIT HEALTH: 78 Note: Net Audit Health % =	LTH: dit Health		0-((Tot	al NREP	s/Total	3% 100-((Total NREPs/Total Possible NREPs) x 100)	REPs) x	(00			
1	NREP Summary Table	Table										
£ 7 €	ĸŌ≩Ĕ	Critical NREPs: Warning NREPs: Total NREPs:	EPs: 3EPs:	35,789 58,897 94,686	6 ~ 9							
* T	NREPs Ratio by Category Graph	Category	Graph			:						
表 】	Notes:											
	NODE CORRELATION TABLE	ATION TA	BLE									
47		Overall Performance	Perform	tarce	Fault		Capacity Planning	lanning.	Configuration Total	ration	Total	Total
	Node Name	Rank NREPs Rank NREPs	VREPs	Rank	NREPs	Rank	NREPs	Rank	NREPs	Rank	NREPs	Hank Hank
											į	

Fig. 4E

Inventor(s): Joe DEPAOLANTONIO
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500

Confi	guration Management Section 510
System	511
Media	512
Protocol	513
Node	514

F	Fault Management Section 520
System	521
Media	522
Protocol	523
Node	524

Perfo	ormance Management Section 530
System	531
Media	532
Protocol	533
Node	534

Ca	pacity Management Sec	tion 540
System	541	
Media	542	
Protocol	543	
Node	544	

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Value Configuration System NREPs: Component Name Total NREPs Value Capacity Planning Component Name Total NREPs Model: 009 Value Performance Component Name Total NREPs Value SUBIMPACT AREA: Component Name Fault Total NREPs

FIG. 6

TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Network Element Table		710			
Network Element Name	IP Address	Node ID	STM Mode	Timing Mode	
	ш.	FIG. 7A			
Board Table		720			
Network Element Board Name Stot Name Name	Name Stot Name	Part Number	Serral Hard	Hardware Firmware Box Version Version Sta	Status
		FIG. 7B			
BITS and Synchronization Reference Table	ference Table	730			
Network Element Name	BITS-1 Reterence	BITS-2 Reference	ference	Synchronization	
	Line code Framing	Time code	Framing	Primary Second Third	2
					П

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Network Element Protection Table	on Table	7	740				
Network Element Working Stat Name Number	forking Slot Number	Protection Slot Number	Protection Group	Profection Name	Revertive Mode	Revertive Time (mins)	
		FIG. 7D	. 7D				
丟	n Table	7	750				
Network Element Name	Working Facility	Protection Pi Facility	Profection Name	Revertive F	Revenive Time (mins)	Bi-directional Switch Mode	
		FIG. 7E	. Æ				
Cross Connect Table		7	760				
Network Element Name		From STS Cross Connect		To STS Cross Connect		Cross Connect Type	
		FIG	FIG. 7F				

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FIG. 7

C I

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	Description Recommendation			r Alarm Status	
810	Firmware Software Version	FIG. 8A	820	Slot Number	FIG 8B
J Notice Table	Card Type Hardware Version			f Name Board Name	
Network Element Field	Field Notice (Alarm Status Table	Network Element	

Number Violations Seconds Seconds	ance Table Nament Facility ance Table Facility		FIG. 9B	Errored Several Severa	Seconds ds Severely Erro ds Severely Erro ds Severely Erro	Frame (AIS)	FIG. 9A Fig. 9A Coding Errored Severely Errored Unavailable Seconds Sconds Severely Errored Unavailable Seconds FIG. 9B FIG. 9B FIG. 9B Sourced Severely Errored Unavailable Seconds Seconds Severely Errored Unavailable Seconds Seconds Severely Errored Unavailable Seconds Source Severely Errored Unavailable Seconds Source Severely Errored Unavailable Seconds
		TO SEE				<u> </u>	

inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Engineer / Audit Comments and Net Advice Available Slots Slot Number Used FIG. 10A Field Name | Frequency | Appendix Reference 1020 1010 Board Name Network Element Capacity Table Network Element Name Net Audit Task List Table Node

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Iteration 2: Reason for Failure	router	C2900
Iteration 1. Reason for Fallure	PASS	PASS
Host name or IP Address	Router I	Router I

The Failure Type is one of the following:

Duplicated_Fail

Device in the list more than once and data was unsuccessfully collected.

Duplicated_Pass

Device in the list more than once and data was successfully collected.

FAIL Device either had unknown IDs or passwords, or could not be reached due to network problems.

Not Used

Device was in the initial audit request but was not in the device list at the time of the collection

Device is a 29xx switch, not a router. NATkit will be corrected in the future to properly classify the 29xx switches, so that they do not appear in the Router Stability Net Audit.

Incomplete Command Set

During the data collection, one or more commands were not retrieved from the router, most likely because the connection between the NATkit and the router failed.

Fig. 10C

Inventor(s): Joe DEPAOLANTONIO

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<u></u> ₹ ₹		2	1103
	1107 FI=NOC! FI"	EI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CCEI=NOCLEI" CCEI=NOCLEI" SC,CLEI=NOCLEI" ACCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" CLEI=NOCLEI" 4,CLEI=NOCLEI"	
	6A 6A - FAA04139D8D CI	06E, FWVER=76-99-00007-x02a, SN=002518, CLEI=NOCLEI" ER=A0, FWVER=76-99-00007-x02a, SN=002518, CLEI=NOCLEI" ER=A0, FWVER=76-99-00011-x02a, SN=080015, CLEI=NOCLEI" R=005D, FWVER=76-99-00011-x02a, SN=082637, CLEI=NOCLEI" R=005D, FWVER=76-99-00014-x02a, SN=082637, CLEI=NOCLEI" R=005D, FWVER=76-99-00068-004b, SN=FAA04079L8C, CLEI=NOCLEI" FWVER=NOT APPLICABLE. SN=08601, CLEI=NOCLEI" R=003D, FWVER=76-99-00069-004b, SN=120429, CLEI=NOCLEI" ER=A0, FWVER=76-99-00067-002a, SN=120429, CLEI=NOCLEI" ER=A0, FWVER=76-99-00089-002a, SN=120429, CLEI=NOCLEI" ER=B0, FWVER=76-99-00099-004a, SN=683653, CLEI=NOCLEI" R=B0, FWVER=76-99-0009-004a, SN=683653, CLEI=NOCLEI" R=B0, FWVER=76-99-0009-004a, SN=683653, CLEI=NOCLEI"	Output CER MA INV CER MA INV CER MA INV CER MA INV
	4A 5A 5A 64-FAA04139DRD CI FI=NOCI FI"	ER-006E, FWVER=76-99-00007-x02a, SN=002518, CLEI=NOCLEI" 1WVER=A0, FWVER=76-99-000011-x02a, SN=080015, CLEI=NOCLEI" 1WVER=A0, FWVER=76-99-00011-x02a, SN=080015, CLEI=NOCLEI" 1WVER=005D, FWVER=76-99-00014-x02a, SN=082025, CLEI=NOCLEI" 1WVER=005D, FWVER=76-99-00014-x02a, SN=082025, CLEI=NOCLEI" 1WVER=005D, FWVER=76-99-00014-x02a, SN=082025, CLEI=NOCLEI" 1WVER=A0, FWVER=76-99-00068-004b, SN=FAA04079L72, CLEI=NOCLEI" 1WVER=A0, FWVER=76-99-00068-004b, SN=FAA04079L72, CLEI=NOCLEI" 1WVER=003D, FWVER=76-99-00067-002a, SN=105137, CLEI=NOCLEI" 1WVER=003F, FWVER=76-99-00067-002a, SN=120429, CLEI=NOCLEI" 1WVER=B0, FWVER=76-99-00099-004a, SN=7804229GXC, CLEI=NOCLEI" 1WVER=B0, FWVER=76-99-0009-004a, SN=604704, CLEI=NOCLEI" 1WVER=P05D, FWVER=76-99-0009-004a, SN=604704, CLEI=NOCLEI"	Field Name Slot Number Card Type Part Number Hardware Version Serial Number
>RTRV-INV::SLOT-ALL:301;	NODE 1 1970-01-06 01:55:57 M 301 COMPLD 1A 2A 3A 4A "SI OT-1 DS3N-19-DM-R00-06590-03 HWW/FE		1104 Index Number 1A 2A 3A 4A 4A 5A 6A

FIG. 11A

Inventor(s): Joe DEPAOLANTONIO

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<	ALL:123:15MIN:		1111
NODE 3 1970-01-02 18:0 M 123 COMPLD	4:02		
1H 2H "FAC-5-1:SEFS,6,COMPL	.,NEND,15MIN,BTH"		
"FAC-5-1:CVL,0,COMP,N	END,15MIN,BTH"		
"FAC-5-1:ESL,6,COMPL,I	NEND,15MIN,BTH"		
"FAC-5-1:SESL,6,COMPL	.,NEND,15MIN,BTH"		1112
"FAC-5-1:UASL,0,COMPL	.,NEND,15MIN,BTH"		\leftarrow
"FAC-5-1:FCL,1,COMPL,I	NEND,15MIN,BTH"		
	COMPL,NEND,15MIN,RCV"		
	COMPL,NEND,15MIN,RCV"		
10H "FAC-5-1:NPJC-PGEN,0,0	COMPL, NEND, 15MIN, TRUT.		
11H "FAC-5-1:PPJC-PGEN,0,0	COMPL,NEND,15MIN,TRUT.	· · ·	
12H "FAC-5-1:CVL,0,COMPL,I	FEND,15MIN,BTH"		
13H "FAC-5-1:ESL,0,COMPL,I	FEND,15MIN,BTH"		
14H "FAC-5-1:SESL,0,COMPL	_,FEND,15MIN,BTH"		
15H "FAC-5-1:JASL,0,COMPL	.,FEND,15MIN,BTH"		
16H "FAC-5-1:FCL,0,COMPL,I	FEND,15MIN,BTH"		
Index Number	Field Name	Output	
1H	Factory	Output CER_MA_PM_OP	3
1H 2H	Factory SEFS_NEND	CER_MA_PM_OP CER_MA_PM_OP	
1H 2H 3H	Factory SEFS_NEND CVL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
1H 2H 3H 4H	Factory SEFS_NEND CVL_NEND ESL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
1H 2H 3H 4H 5H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
1H 2H 3H 4H 5H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	1113
1H 2H 3H 4H 5H 6H 7H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV	CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP CER_MA_PM_OP	1113
1H 2H 3H 4H 5H 6H 7H 8H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H 11H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H 11H 11H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H 11H 11H 12H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND ESL_FEND	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H 11H 11H 12H 13H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND ESL_FEND SESL_FEND	CER_MA_PM_OP	
1H 2H 3H 4H 5H 6H 7H 8H 9H 11H 11H 12H	Factory SEFS_NEND CVL_NEND ESL_NEND SESL_NEND UASL_NEND FCL_NEND NPJC_RCV PPJC_RCV NPJC_TRMT PPJC_TRMT CVL_FEND ESL_FEND	CER_MA_PM_OP	

FIG. 11B

				1131	Ţ	1132	7		_	9		7	_									
SECTION CONTRACTOR CON	Unavailable	Seconds		CER_MA	_PM_OP	Index 15H	_	If the number	exceeds 3 for	a 15 min.	interval or	exceeds 10	for a 1 day	interval, flag	RED		,		,			
Charles And Charles Company of the C	Severely	Errored	Seconds	CER_MA	_PM_OP	Index 14H		If the number If the number If the number	exceeds 1 for exceeds 3 for	a 15 min.	interval or	exceeds 4	for a 1 day	interval, flag	RED							
	Errored	Seconds		CER_MA	_PM_OP	Index 13H	1	If the number	exceeds 87	for a 15 min.	interval or	exceeds 864	for a 1 day	interval, flag	RED							
Far End	Coding	Violations		MA CER MA PM OP		Index 12H	1	OC3 interfaces	If the number exceeds	1312 for a 15 min. interval	or exceeds 13,120 for a 1	day interval, flag RED.	OC12 interfaces	If the number exceeds	5315 for a 15 min. interval	or exceeds 53,250 for a 1	day interval, flag RED.	OC48 interfaces	21,260 for a 15 min.	interval or exceeds	212,600 for a 1 day	interval, flag RED.
Optical Performance Table - Far End		**: Number Number		CER MA	PM_OP	ndex 2A Index 1H Index 1H	1															
erformanc	Slot	Number		CER MA CER MA CER	PM OP	Index 1H	5														· · · · · · · · · · · · · · · · · · ·	
Optical Po	Network Facility Slot Port				1 <u>N</u>	Index 2A	OC-48						·									
	Network	Element	Name	2			NODE 1															

FIG. 11C

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COMMAND	RETRIEVED INFORMATION
RTRV-INV::SLOT-xxx:yyy;	Slot number, Card Type, Part Number, Hardware Version, Firmware Version, and Serial Number.
RTRV-NE:::;	Internet Protocol (IP) Address, Synchronous Transfer Mode, Node Identification (ID), and Timing Mode.
RTRV-EQPT::SLOT-xxx:yyy;	Slot Number, Card Type, and Card Status.
RTRV-BITS::BITS-NE:xxx:yyy;	BITS Reference Number, Line Coding, and Frame Format.
RTRV_SYNC::SYNC-NE:xxx:yyy;	Synchronization Sources such a First Primary Synchronization Source, Second Synchronization Source, and a Third Synchronization Source.
RTRV_ALM-ALL:::yyy;	Alarms and associated Slot Numbers.
RTRV-TOD:::yyy;	Time of Day
RTRV-PM-OCvv:: FAC-xxx-ALL:yyy::,,,,zzz,,;	Facility and Near End and Far End performance such as transmission and reception Severely Errored Framing Second (SEFS), Line Coding Violation (CVL), Line Errored Second (ESL), Line Severely Errored Second (SESL), Path Unavailable (UASP), Path Coding Violation (CVP), Path Second Errored Second (ESP), and Path Severely Errored Second (SESP). Transmission and reception NPJC and PPJC information.
RTRV-PM-TI: FAC-xxx- ALL:yyy::,,,,zzz,,;	Facility and Near End performance such as transmission and reception Severely Errored Framing Second (SEFS), Line Coding Violation (CVL), Line Errored Second (ESL), Line Severely Errored Second (SESL), Line Unavailable Second (UASL) and Line Failure Count (FCL). Transmission and reception NPJC and PPJC information.
RTRV-OCvv:: FAC-xxx-ALL:yyy::,,,,zzz,,;	Facility, Section DCC Enabled, Timing Source for TCC/TMG Card, Span Switch Wait to Restore Time, STA Monitored Facility for Pointer Justifications, Signal Failure Bit Error Ratio, Signal Degrade Bit Error Ratio Threshold, Facility state, Protection Group Role, and Protection Croup Status.
RTRV-T3:CERENT:FAC-xxx- y:zzz:::; or RTRV-T1:TID:FAC-vv- luu:yyvy;	Facility, Line Type, Line Coding, Line Buildout, and Primary Service State.
RTRV-FFP-EQPT::SLOT-vv:yyy;	Working Slot Number, Protection Slot Number, Protection Group, Protection name, Revertive Mode, and Revertive Time.
	Continued on sheet 22 of 31 ———————————————————————————————————

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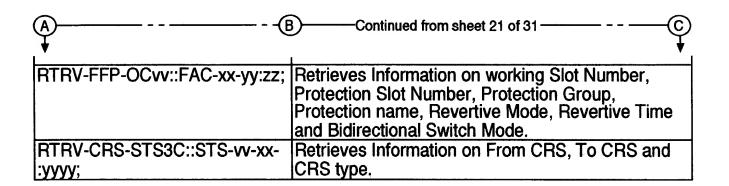


FIG. 11D (Continued)

TITLE: "OPTICAL TRANSPORT CONCENTRATOR AUDIT SYSTEM AND METHOD" Inventor(s): Joe DEPAOLANTONIO USSN: 09/828,022 Attorney Docket #: CSCO-3809

Net Rule	Heading	Description
OC3 Interfaces	Optical	For OC3 Interfaces
If the number exceeds 1312 for a 15 min.	Performance	If the number exceeds 1312 for a 15 min. interval or
interval or exceeds 13,120 for a 1-day interval	Table Near and	exceeds 13,120 for a 1-day interval are bolded red
OC12 Interfaces	Far end coding	For OC12 Interfaces
If the number exceeds 5315 for a 15 min.	Violations	If the number exceeds 5315 for a 15 min. interval or
interval or exceeds 53,250 for a 1-day interval		exceeds 53,250 for a 1-day interval are bolded red
OC48 Interfaces		For OC48 Interfaces
If the number exceeds 21,260 for a 15 min.		If the number exceeds 21,260 for a 15 min. interval or
interval or exceeds 212,600 for a 1-day interval		exceeds 212,600 for a 1-day interval are bolded red
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 13,340 for a 15 min.	Performance	If the number exceeds 13,340 for a 15 min. interval or
interval or exceeds 133,400 for a 1-day interval	Near End Table	exceeds 133,400 for a 1-day interval are bolded red.
DS-3 Interfaces	Coding	For DS-3 Interfaces
If the number exceeds 387 for a 15 min.	Violations	If the number exceeds 387 for a 15 min. interval or
interval or exceeds 3865 for a 1-day interval		exceeds 3865 for a 1-day interval are bolded red.
EC-1 Interfaces		For EC-1 Interfaces
If the number exceeds 1312 for a 15 min.	(If the number exceeds 1312 for a 15 min. interval or
interval or exceeds 13,120 for a 1-day interval		exceeds 13,120 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 387 for a 15 min.		If the number exceeds 387 for a 15 min. interval or
interval or exceeds 3865 for a 1-day interval		exceeds 3865 for a 1-day interval are bolded red.
9)———((F)
	Fig. 11E	

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	E()	(F)
If the number exceeds 87 for a 15 min.	Optical	If the number exceeds 87 for a 15 min. interval or
interval or exceeds 864 for a 1-day interval	Performance	exceeds 864 for a 1-day interval are bolded red
	Table Near and	
	Far end Errored	
	Seconds	
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 65 for a 15 min.	Performance	If the number exceeds 65 for a 15 min. interval or
interval or exceeds 648 for a 1-day interval	Near End Table	exceeds 648 for a 1-day interval are bolded red
DS-3 Interfaces	Errored Seconds	DS-3 Interfaces.
If the number exceeds 25 for a 15 min.		For DS-3 Interfaces
interval or exceeds 250 for a 1-day interval		If the number exceeds 25 for a 15 min. interval or
EC-1 Interfaces		exceeds 250 for a 1-day interval are bolded red.
If the number exceeds 87 for a 15 min.		For EC-1 Interfaces
interval or exceeds 864 for a 1-day interval	7	If the number exceeds 87 for a 15 min. interval or
DS3XM-6 Interfaces		exceeds 864 for a 1-day interval are bolded red.
If the number exceeds 25 for a 15 min.		For DS3XM-6 Interfaces
interval or exceeds 250 for a 1-day interval		If the number exceeds 25 for a 15 min. interval or
		exceeds 250 for a 1-day interval are bolded red.

Fig. 11E (Continued)

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Net Rule	Heading	Description
DS1 Interfaces	Severely Errored	For DS1 Interfaces
If the number exceeds 10 for a 15 min.	Frame (AIS)	If the number exceeds 10 for an15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
OS3 Interfaces		For DS-3 Interfeces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
EC1 Interfaces		For EC-1 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
If the number exceeds 1 for a 15 min.	Optical	If the number exceeds 1 for a 15 min. interval or
interval or exceeds 4 for a 1-day interval	Performance	exceeds 4 for a 1-day interval are bolded red.
	Table Near and	
	Far end Severely	
	Errored Seconds	
)		Continued on sheet 26 of 31 — ——————————————————————————————

Fig. 11F

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26/31 If the number exceeds 10 for a 15 min. interval or exceeds 100 for a 1-day interval are bolded red. If the number exceeds 4 for a 15 min. interval or If the number exceeds 1 for a 15 min. interval or If the number exceeds 4 for a 15 min. interval or exceeds 40 for a 1-day interval are bolded red. exceeds 40 for a 1-day interval are bolded red. exceeds 4 for a 1-day interval are bolded red. - - Continued from sheet 25 of 31 -– Continued on sheet 27 of 31 For DS3XM-6 Interfaces Displays Slot Number For DS-3 Interfaces For EC-1 Interfaces For DS1 Interfaces Severely Errored Near End Table Performance Slot Number Electrical Seconds interval or exceeds 100 for a 1-day interval interval or exceeds 40 for a 1-day interval interval or exceeds 40 for a 1-day interval interval or exceeds 4 for a 1-day interval If the number exceeds 10 for a 15 min. If the number exceeds 4 for a 15 min. If the number exceeds 1 for a 15 min. If the number exceeds 4 for a 15 min. DS3XM-6 Interfaces DS-3 Interfaces EC-1 Interfaces DS1 Interfaces

Fig. 11F (Continued)

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(W)	(N)(N))
DS1 Interfaces	Electrical	For DS1 Interfaces
If the number exceeds 3 for a 15 min.	Performance	If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval	Near End Table	exceeds 10 for a 1-day interval are bolded red.
DS-3 Interfaces	Unavailable	For DS-3 Interfaces
If the number exceeds 3 for a 15 min.	Seconds	If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
EC-1 Interfaces		For EC-1 Interfaces
If the number exceeds 3 for a 15 min.		If the number exceeds 3 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
DS3XM-6 Interfaces		For DS3XM-6 Interfaces
If the number exceeds 10 for a 15 min.		If the number exceeds 10 for a 15 min. interval or
interval or exceeds 10 for a 1-day interval		exceeds 10 for a 1-day interval are bolded red.
If the number exceeds 3 for a 15 min. interval or	Optical	If the number exceeds 3 for a 15 min. interval or
exceeds 10 for a 1-day interval	Performance	exceeds 10 for a 1-day interval are bolded red
	Table Near and	
	Far end	
	Unavailable	
	Seconds	

Fig. 11F (Continued)

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Recommendation	Old revision boards will not operate with CTC 2.2. It is important to understand that without the upgraded cards Ethernet traffic will not operate using CTC 2.2 If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368	This issue has been corrected in the current release of all OC-12 cards (Part # 800-06758-02, 800-06759-02) and all subsequent versions. If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368	\$	•
Description	Incorrect coding in C2 byte of obtical backbone facility. All version of the E100T card prior to 800-06747-05 A0 will require a hardware upgrade to support features introduced in version 2.2 CTC (Cisco Transport Controller) and later	Bit errors may be seen on an OC-12 card when the incoming line frequency is less than the NE's internal; clock by more than 4ppm. This can happen as a result of synchronization problems in the network, or if the node is operating in free running synchronization timing references drift off frequency by 4ppm or more, or when networks are configured to free running synchronous mode.	Continued on sheet 29 of 31 -	FIG. 12
Software Version	NA	N/A	Cont	
Firmware Software Version Version	N/A	NA		
Hardware Version	E100T 800-06747-05 A0 or prior	800-06758-01 A0 800-06759-01 A0 800-06760-01 A0) <u>-</u>	
Card Type	E100T	OC12 Cards	, ,	
Field Notice Card Number Type	12851	6		-

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Ø → ¬	
£	Screen each node to determine if these defective TCCs are present and replace them if they are identified to contain the defective component. If you need additional technical assistance, please call the Cisco Technical Assistance Center at (877) 323-7368
	While performing a software upgrade to specific TCCs or activating software on specific TCCs these processes may fail Additional failure symptoms could include unexplained resets of the TCC.
<u>ලි</u> 	N/A
	NA
	TCC Serial number N/A sard ranges of 31550 and 45500 and FAA04280001 through FAA0430A4BA
	TCC
(a) +-	12652

FIG. 12 (Continued)

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		30	/31
Net Advisor	Include ?	>	> :
	Net Advice	Verify the current value set and investigate why it has changed from default. In some networks, turning is advantageous and values other than default are acceptable.	Verify the current value set and investigate why it has changed from default. In some networks, tuning is advantageous and values other than default are acceptable
Net Audit Version 4	Net Info	hourly Bit Error Ratio For Signal Fail - the default value is 1E-4. It has been set and investigate a determined that your value is something other than the default. In some the default value is 1E-7. It has been advantageous and determined that your value is something other than something other than the default.	hourly Line type - the default value for all DS and EC interfaces except the S3XM-6 is D4. The default value it has changed for the DS3XM-6 is C Bit. It has been default. In some determined that your value is something other than the default value for the DS3XM-6 interfaces except the DS3XM-6 interface is B3ZS. It has been determined that your value is something other than the default.
Net	Poll Freq	hourly	hourly
	MIB (If applicab (e)		ا
	Sub	Perform System ance Media Cofigur ation Fault	Perform System ance Media Cofigur ation Fault
	Section	Perform ance Cofigur ation Fault	Perform ance Cofigur ation Fault
	Key Sub Variable Section Section (s)		
	Command	RTRV-OC48:: FAC-6-1:236;	RTRV-TG3: CERENT:FAC- 1-2:123::::;

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		· ·
		Verify the current value set and investigate why it has changed from default. In some networks, tuning is advantageous and values other than default are acceptable
-Continued from sheet 30 of 31	Circuit Line Buildout - the default value for DS-1 interfaces is 0-131. The default value for EC-1 and DS-3 interfaces is 0-255. The default value for the EC1-12 interface is 0-255. It has been determined that your value is something other than the default.	hourly Line type - the default value for all DS and EC interfaces except the DS3XM-6 is D4. The default value for the DS3XM-6 is C Bit. It has been determined that your value is something other than the default. In some default other than the default value for the DS3XM-6 interfaces except the DS3XM-6 interface is B3ZS. It has been determined that your value for DS-1 interfaces is 0-131. The default value for EC-1 and DS-3 interfaces is 0-255. The default value for the EC1-12 interface is 0-255. It has been determined that your value is something other than the default.
රි		hourly
		System
		Perform ance Cofigur Ation Fault
		AG-2-1:1223::::;

FIG. 13 (Continued)